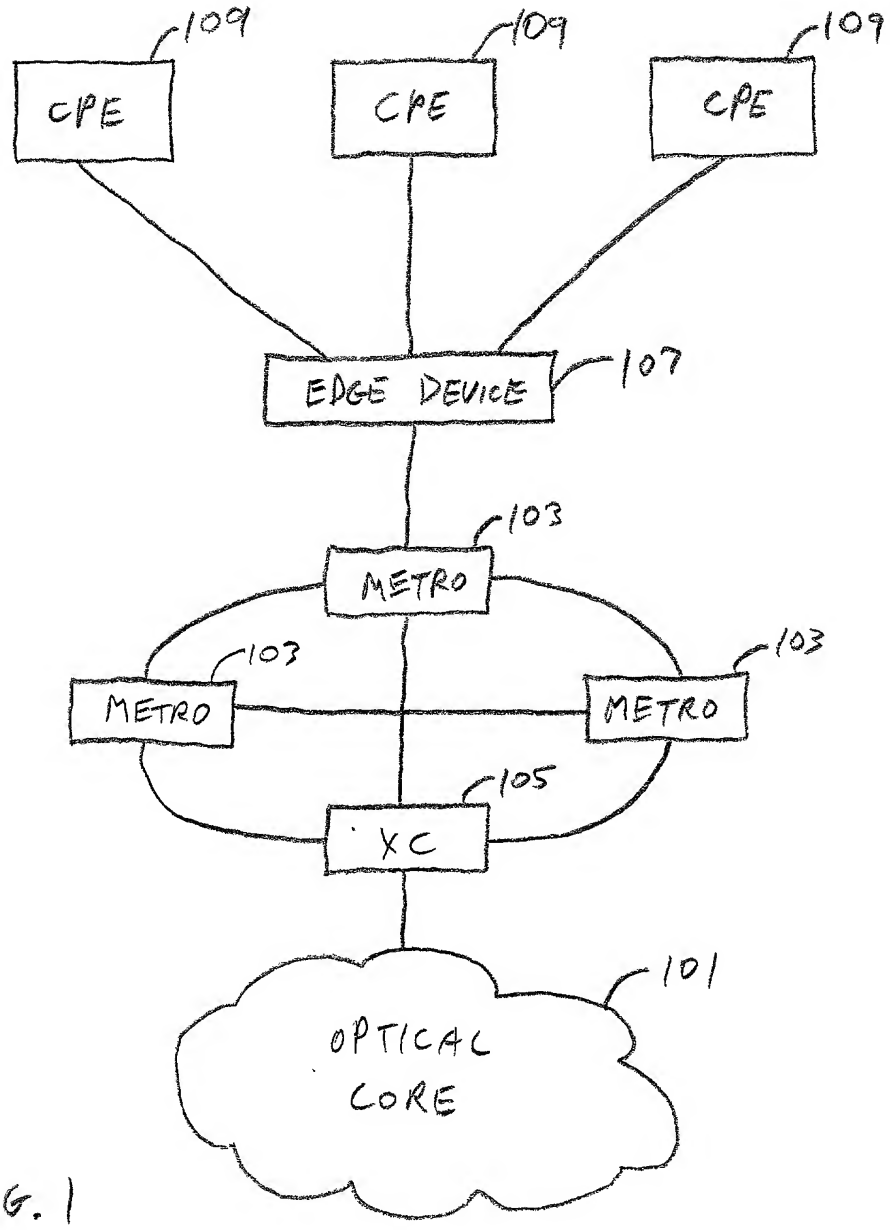

FIG. 1

4006542 v 052202

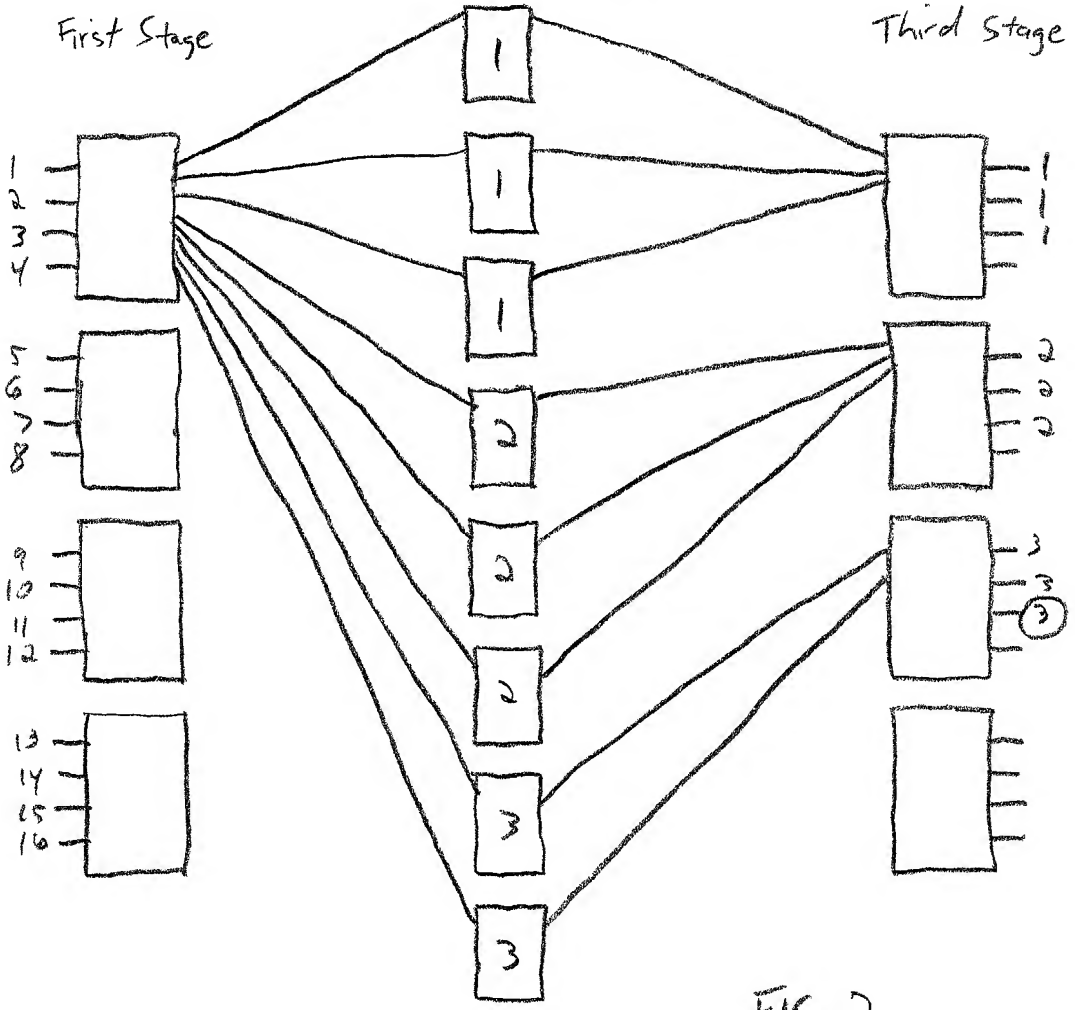
Second Stage
First Stage
Third Stage
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

FIG. 2

208220 "ZTS98001

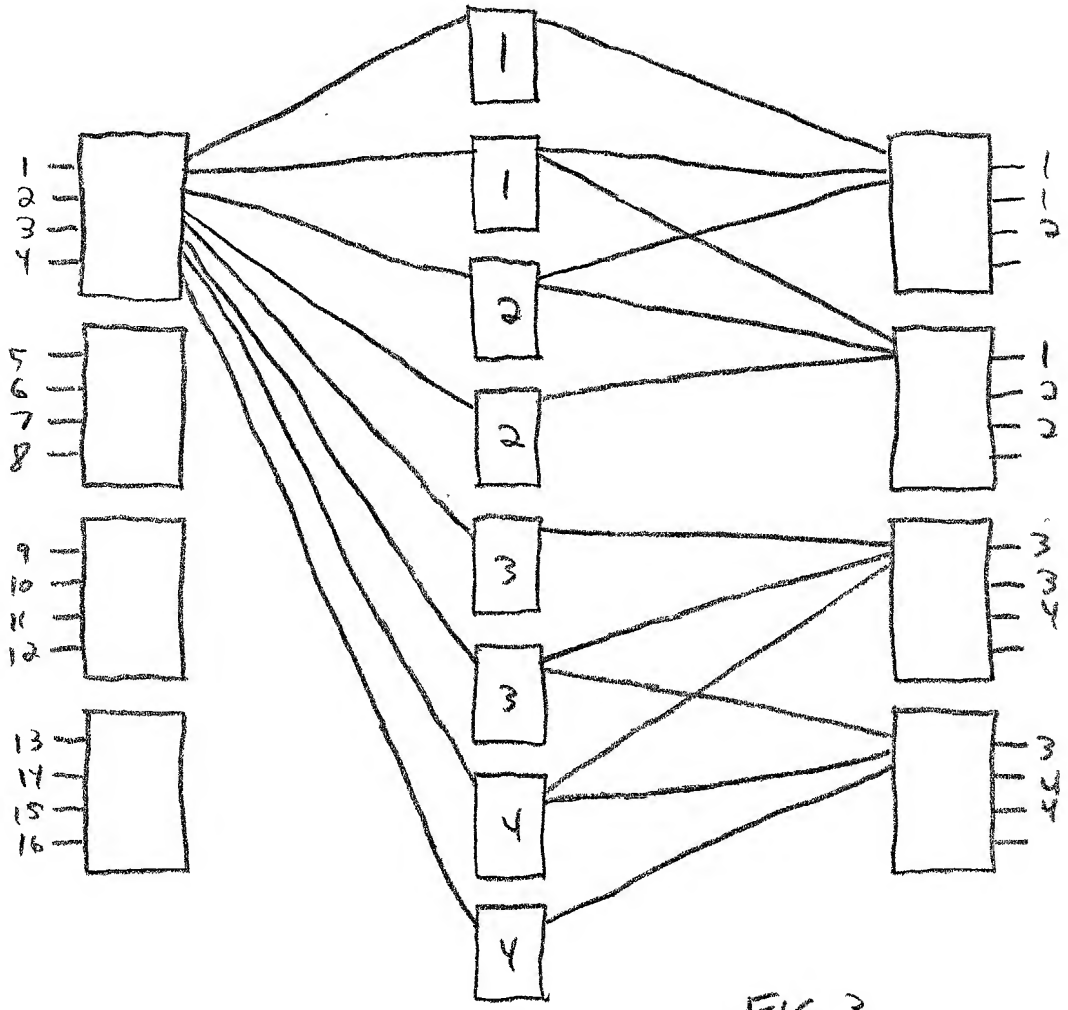

FIG. 3

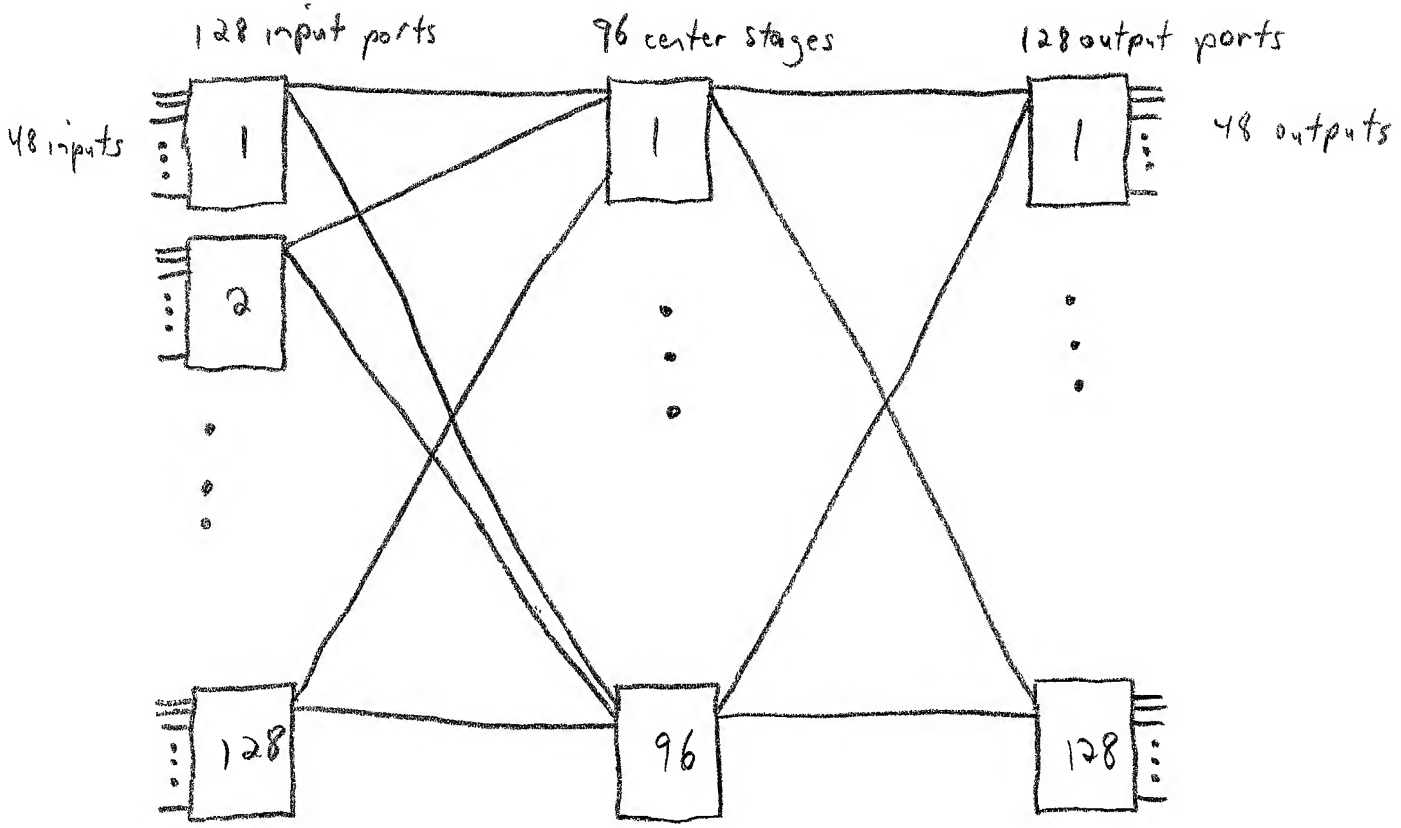
128 input ports
96 center stages
128 output ports
48 inputs
48 outputs
1
2
128
1
96
1
128

FIG. 4

Multi-cast In 6-chip Clos Network

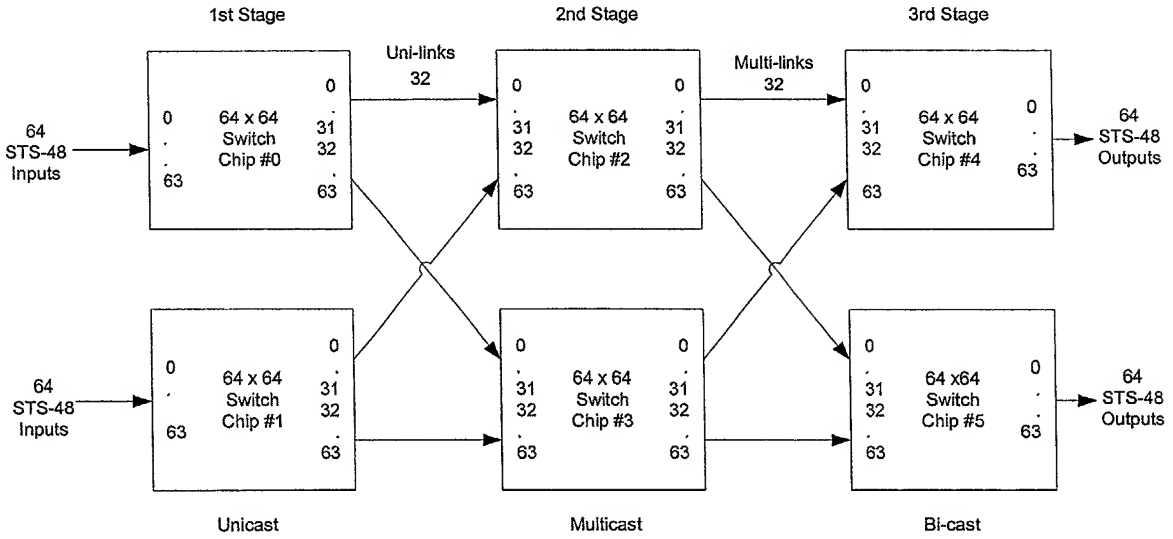

FIG. 5A

Multi-cast In 6-chip Clos Network

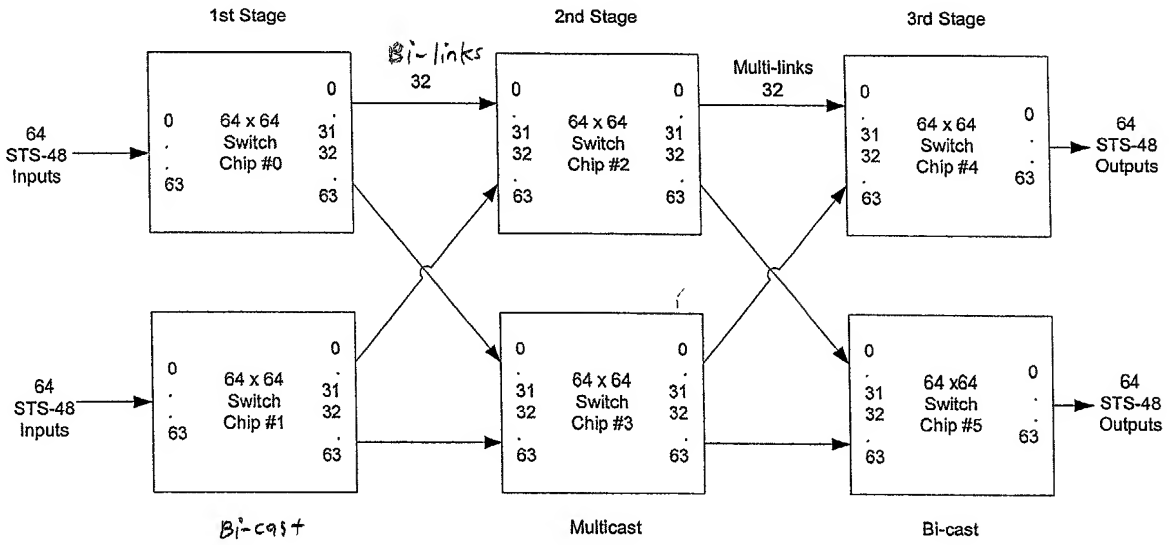

FIG. 5B

20020827.2T598001

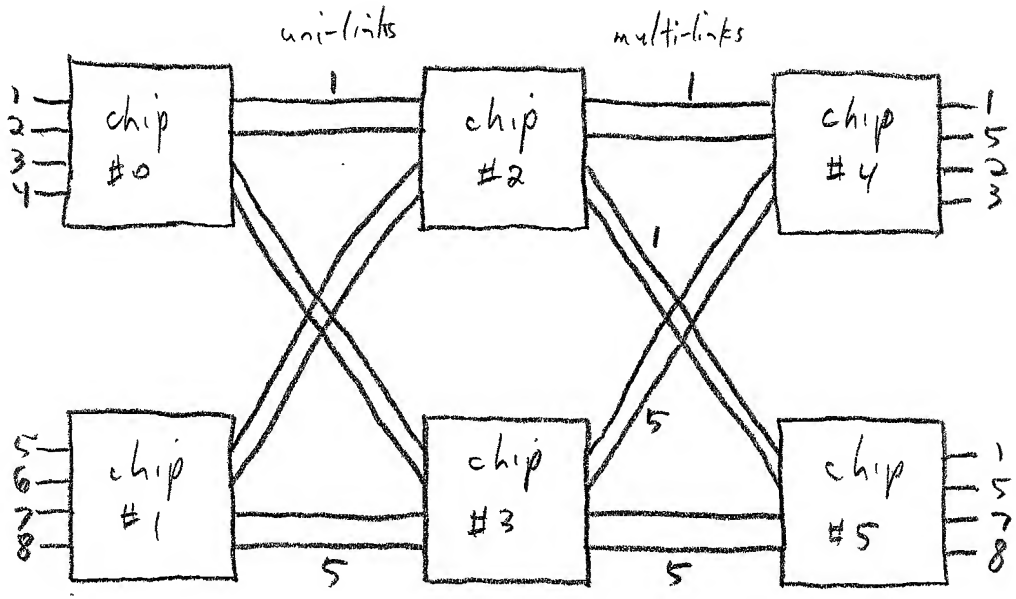

FIG. 6A

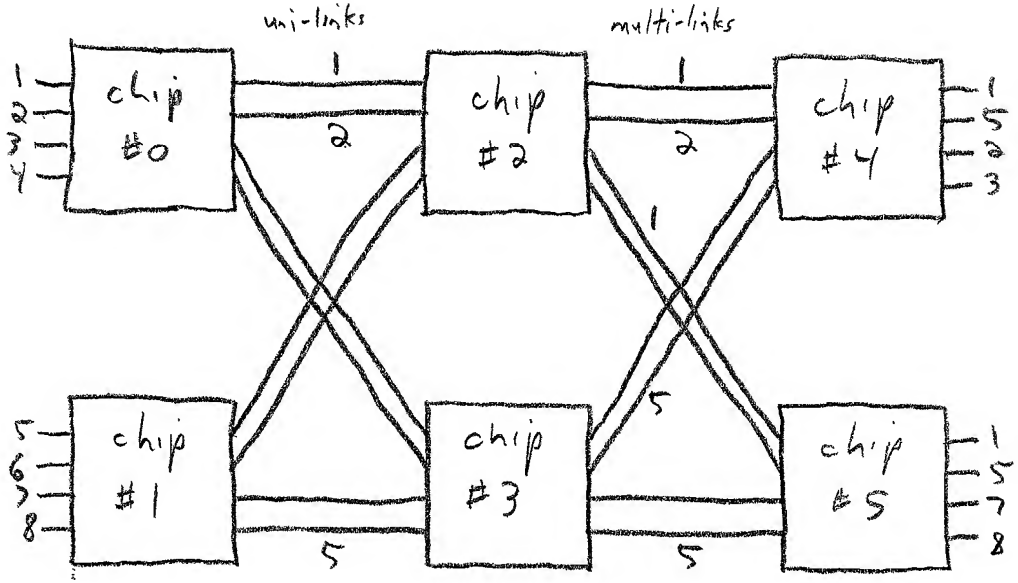
uni-links
multi-links
chip #0
chip #2
chip #4
chip #1
chip #3
chip #5
1
2
3
4
5
6
7
8

FIG. 6B

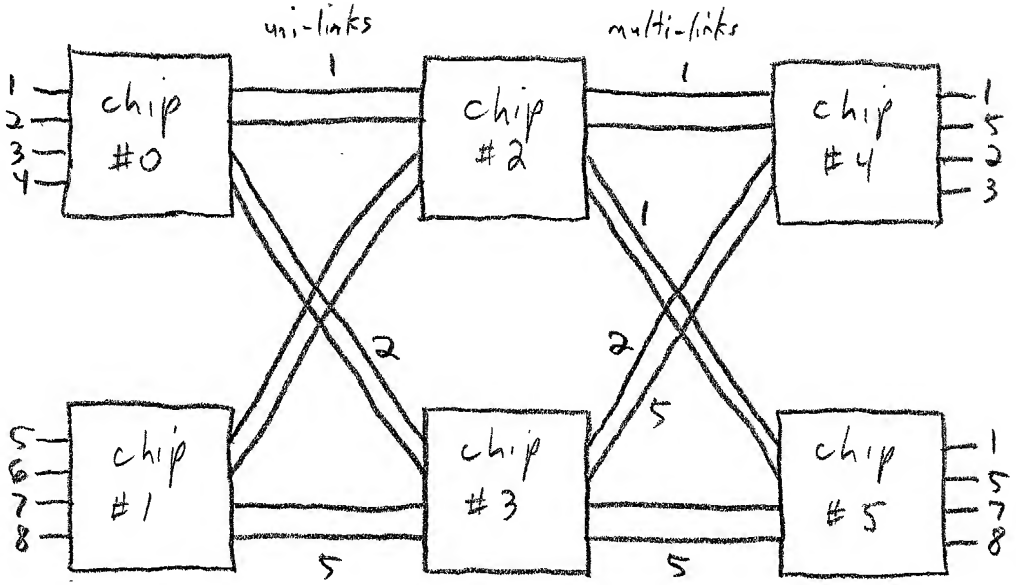
uni-links
multi-links
chip #0
chip #1
chip #2
chip #3
chip #4
chip #5
1
2
3
4
5
6
7
8
1
2
5
1
2
5
1
5
2
3
1
5
7
8

FIG. 6C

	Uni-link usage, difference	Multi-link usage, difference
Signal 2 on top Center Node (FIG. 6B)	2,0,0,1 diff=2	2,1,1,1 diff=1
Signal 2 on bottom Center Node (FIG. 6C)	1,1,0,1 diff=1	1,1,2,1 diff=1

FIG. 6D

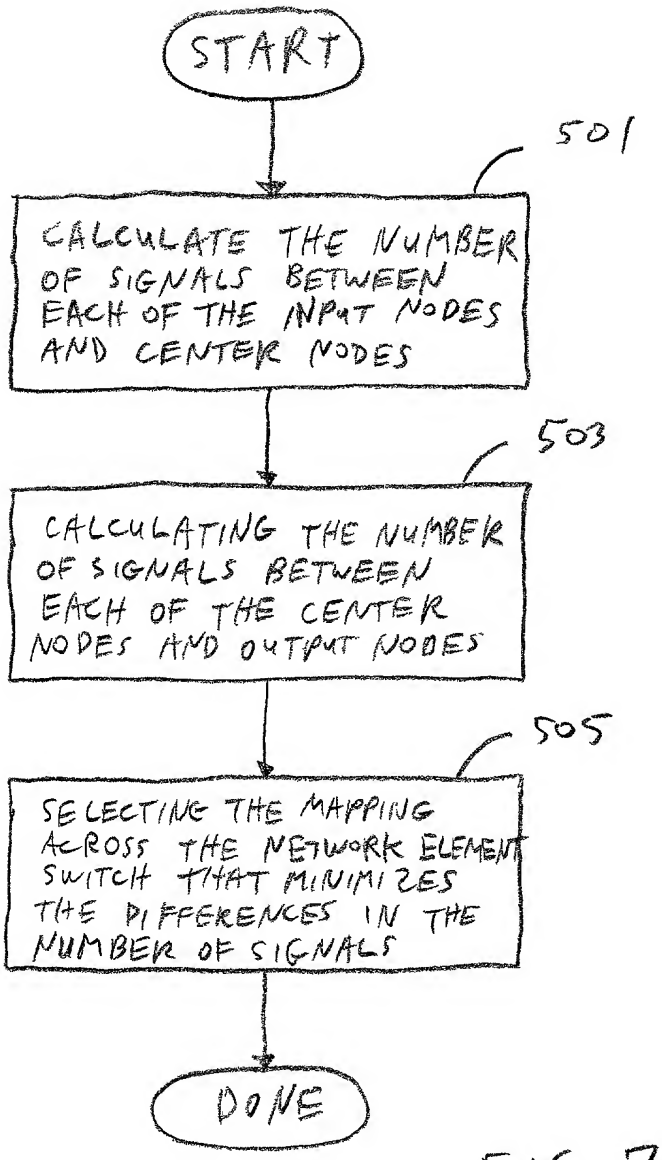
START
501
CALCULATE THE NUMBER OF SIGNALS BETWEEN EACH OF THE INPUT NODES AND CENTER NODES
503
CALCULATING THE NUMBER OF SIGNALS BETWEEN EACH OF THE CENTER NODES AND OUTPUT NODES
505
SELECTING THE MAPPING ACROSS THE NETWORK ELEMENT SWITCH THAT MINIMIZES THE DIFFERENCES IN THE NUMBER OF SIGNALS
DONE

FIG. 7